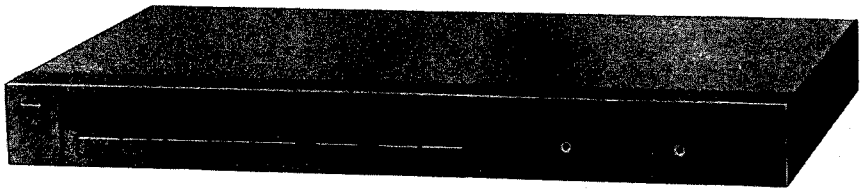
# SB-V5W

# SERVICE MANUAL

*Canadian Model*



September, 1983

## SPECIFICATIONS

| | |
|---|---|
| **Video** | |
| Input | VIDEO IN: phono jack<br>1.5 V p-p max., 75 ohms, unbalanced<br>sync negative |
| Output | VIDEO OUT: phono jack<br>1 ± 0.1 V p-p/input 1.0 V p-p<br>(at MONITOR OUTPUT jack)<br>75 ohms, unbalanced sync negative |
| Signal-to-noise ratio | Better than 45 dB |
| Crosstalk | more than 45 dB (3.58 MHz) |
| **Audio** | |
| Input | AUDIO IN: phono jack<br>Gain 0 dB (1 kHz) 2 V max.<br>30-kilohm impedance |
| Output | AUDIO OUT: phono jack<br>600-ohm impedance |
| Signal-to-noise ratio | Better than 60 dB |
| Separation | 60 dB |
| Crosstalk | more than 60 dB |
| Power requirements | 120 V ac, 60 Hz |
| Power consumption | 6 W |
| AC power outlet | Max 300 W UNSWITCHED |
| Dimensions | Approx. 430 × 55 × 280 mm (w/h/d)<br>(17 × 2¼ × 11⅛ inches) |
| Weight | Approx. 3.0 Kg<br>(6 lb 10 oz) |

MICROFILM

## VIDEO/AUDIO SELECTOR

SONY®

ACC

*MC-Service*

# SECTION 1
# OUTLINE

## 1-1. FEATURES

- Five input jacks and three output jacks accomodate the system connections of your TV sets, video equipment, TV games, microcomputers, etc.
- A pair of input and output jacks on the front panel allow easy connection of a portable video cassette recorder.
- The selector accepts audio signals in two channels so that you can enjoy stereo or bilingual recorded tapes.
- Easy tape copying using the copy buttons on the front panel.

# SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.

**SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.**

**ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!**

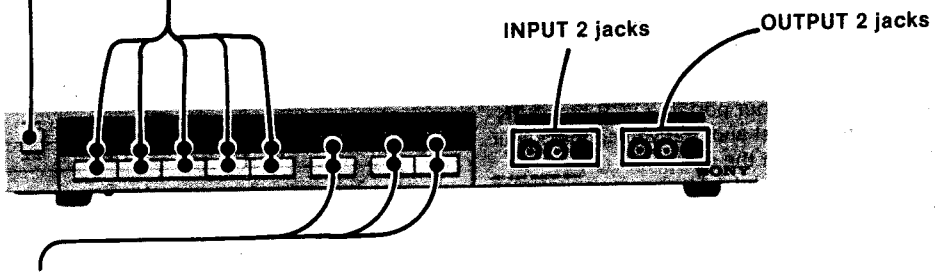
**LES COMPOSANTS IDENTIFIÉS PAR UN TRAMÉ ET UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES, LES VUES EXPLOSÉES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DU CIRCUIT QUI SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT SONT IDENTIFIÉS DANS CE MANUEL. SUIVRE LES PROCÉDURES QUAND LES COMPOSANTS CRITIQUES SONT REMPLACÉS OU LE FONCTIONNEMENT IMPROPRE EST SUSPECTÉ.**

## 1-2. LOCATION AND FUNCTION OF CONTROLS

**(front panel)**

**POWER switch**
Press to turn the power on.
Press again to turn the unit off.

**INPUT SELECT buttons and indicator lamps 1–5**
Press to select the programs
to view, to listen, and to record.
The corresponding green indicator lamp lights up.




**REC (Record) MODE buttons and indicator lamps**

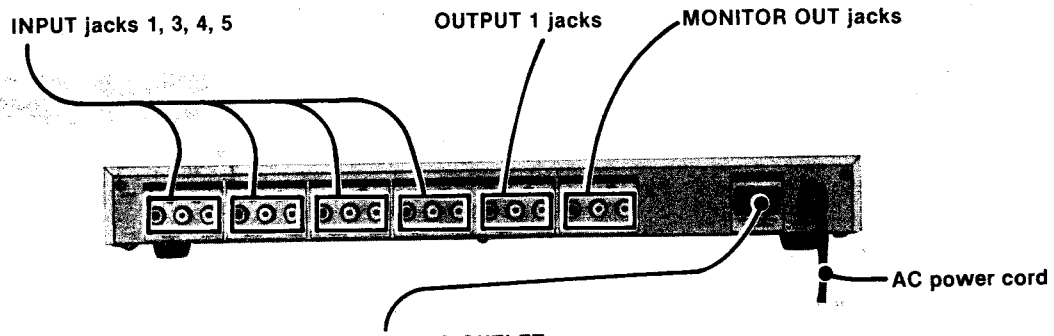
**SOURCE:** Press to record the desired programs (TV programs, video or audio tapes) selected with the INPUT SELECT buttons.

**COPY 1 ▶ 2:** Press to copy the video or audio source of the equipment connected to the INPUT 1 jack on the equipment connected to the OUTPUT 2 jack.

**COPY 2 ▶ 1:** Press to copy the video or audio source of the equipment connected to the INPUT 2 jack on the equipment connected to the OUTPUT 1 jack.

The corresponding red indicator lamp lights up when each button is pressed.

**(rear)**




**120 V AC OUTLET**
MAX 300 W
UNSWITCHED

- Equipment connected to this outlet can be turned on even if the power of this selector is off.
- Connect the equipment whose power consumption is under 300 W.

**Colored phono jacks**
The phono jacks on the selector are colored to indicate the following.
Yellow: Video
Red: Audio R (right) channel
White: Audio L (left) channel

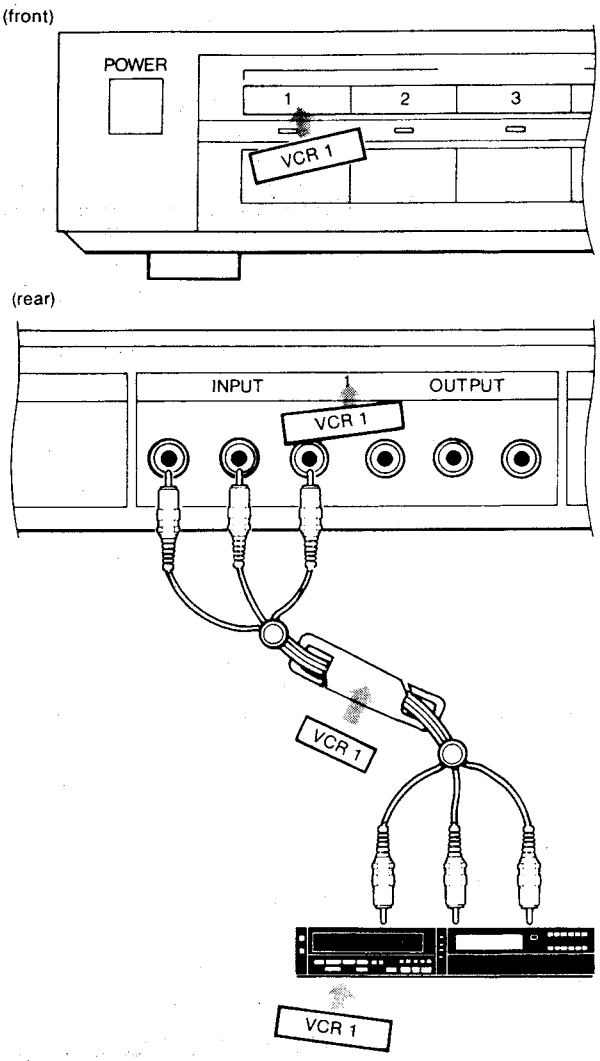
## 1-3. SYSTEM CONNECTIONS

**Notes**
- Turn off the selector before making connections.
- When using the connecting cables to make system connections, be sure to observe these polarities:
  white plug to Left channel of AUDIO IN/OUT jack
  red plug to Right channel of AUDIO IN/OUT jack
  yellow plug to VIDEO IN/OUT jack
- Be sure to insert the cable connectors firmly into the jacks. Loose connections may cause hum and noise.

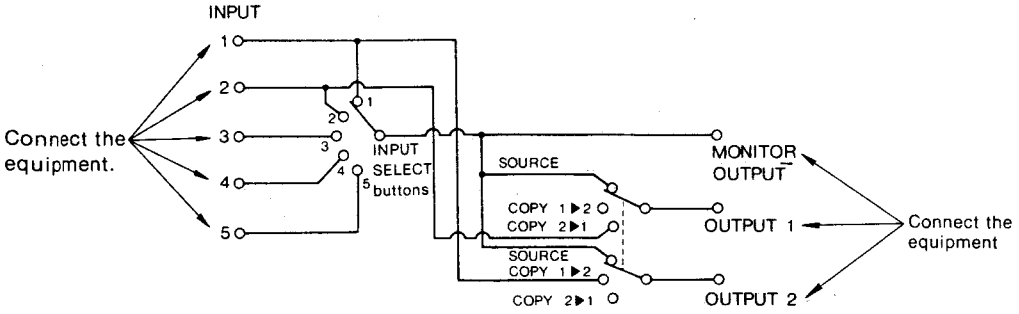
- We recommend that you connect your portable VCR to the [INPUT 2 OUTPUT] jacks on the front panel and that you connect your full-size VCR to the [IN 1 OUT] jacks in the rear.
- When connecting video equipment and a TV tuner to the INPUT 3, 4, and 5 jacks, we recommend that the TV tuner be connected to the INPUT 3 jacks because the selector is automatically set in INPUT SELECT 3 when the power switch is turned on.
- A VCR as well as a color mointor can be connected to the MONITOR OUT jacks.

**Caution**
Television programs, films, video tapes and other materials may be copyrighted. Unauthorized duplication of such material may be contrary to the provisions of the copyright laws.

Use adhesive-backed indicator lables on the appropriate INPUT SELECT buttons, REC MODE buttons, the connecting equipment and cables as desired.




Connect your video and audio equipment in a variety of ways, referring to the following block diagram and the three examples.




For details, read the operating instruction of each unit.



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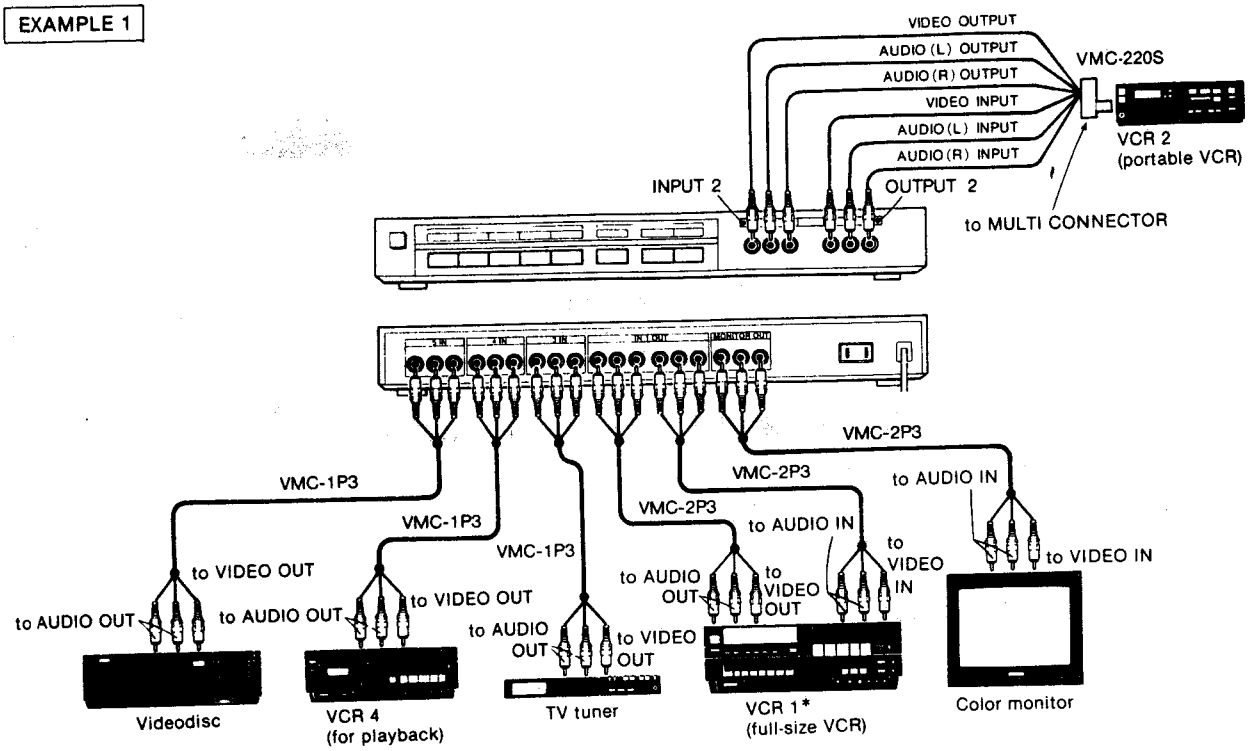
## CONNECTING VIDEO EQUIPMENT

EXAMPLE 1



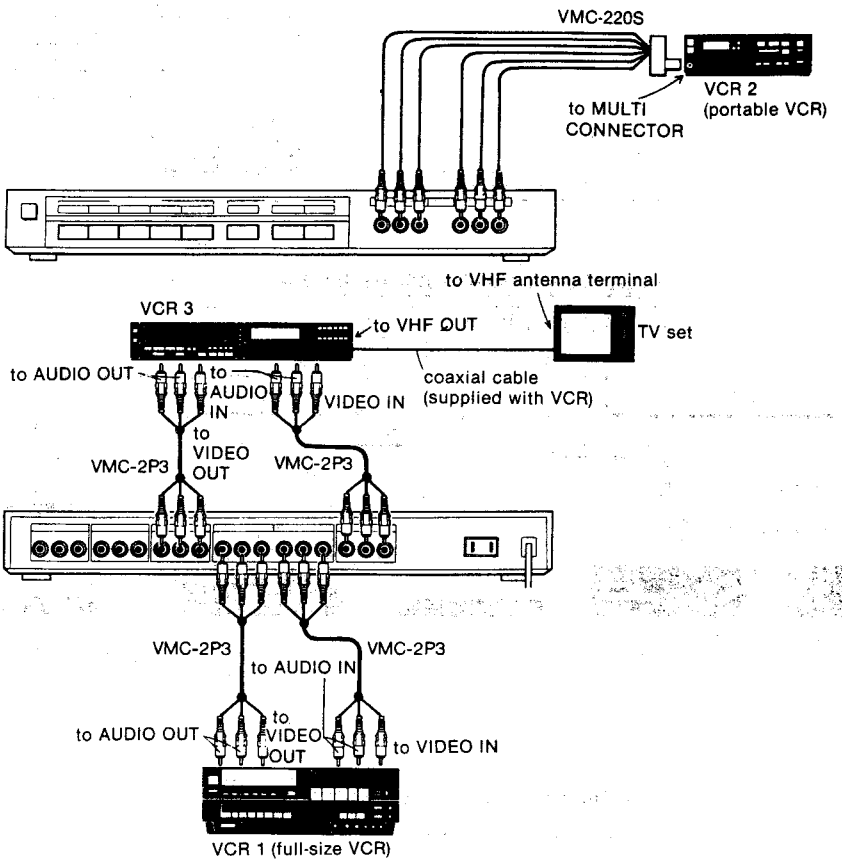

| If you want to view | Press this INPUT SELECT button | Signal path |
|---|---|---|
| a TV program | 3 (automatically set when the power is turned on. | TV tuner → selector → color monitor |
| a video tape of VCR 4 (for playback) | 4 | VCR 4 → selector → color monitor |
| a video tape of VCR 1 | 1 | VCR 1 → selector → color monitor |
| a video tape of VCR 2 | 2 | VCR 2 → selector → color monitor |
| videodisc | 5 | videodisc → selector → color monitor |

| If you want to record | Press these INPUT SELECT or REC MODE buttons | Signal path |
|---|---|---|
| a TV program | INPUT SELECT: 3<br>REC MODE: SOURCE<br><br>(automatically set when the power is turned on.) | TV tuner → selector ↗ VCR 1<br>↘ VCR 2 |
| a video tape of VCR 1 | REC MODE COPY 1 ▶ 2 | VCR 1 → selector → VCR 2 |
| a video tape of VCR 2 | REC MODE COPY 2 ▶ 1 | VCR 2 → selector → VCR 1 |
| a video tape of VCR 4 | INPUT SELECT: 4<br>REC MODE: SOURCE | VCR 4 → selector ↗ VCR 1<br>↘ VCR 2 |
| videodisc | INPUT SELECT: 5<br>REC MODE: SOURCE | VCR 5 → selector ↗ VCR 1<br>↘ VCR 2 |

If the VCR for recording is equipped with a INPUT SELECT switch, be sure to set the switch to the appropriate position.

EXAMPLE 2

**To record a program source on two or three video recorders simultaneously**




**Notes**

- Both VCR 1 and VCR 3 in the above example are stereo video cassette recorders. When connecting monaural video cassette recorders, be sure to use the proper connecting cables, which are different from those used to connect stereo VCRs.
For further details, see the list of optional connecting cables on page 10.
- If the VCR for recording is equipped with the INPUT SELECT switch, be sure to set the switch to the appropriate position.

**To record a program source on three video recorders** simultaneously, connect a video recorder for playback (VCR 4) or videodisc to the INPUT 4 or INPUT 5 jack.

| If you want to record | Press these INPUT SELECT or REC MODE buttons | Signal path |
|---|---|---|
| a video tape of VCR 1 | REC MODE COPY 1 ▶ 2 | VCR 1 → selector → VCR 2 |
| | INPUT SELECT: 1<br>REC MODE: SOURCE | VCR 1 → selector → VCR 2 / VCR 3 |
| a video tape of VCR 2 | REC MODE COPY 2 ▶ 1 | VCR 2 → selector → VCR 1 |
| | INPUT SELECT: 2<br>REC MODE: SOURCE | VCR 2 → selector → VCR 1 / VCR 3 |
| a video tape of VCR 3 | INPUT SELECT: 3<br>REC MODE: SOURCE | VCR 3 → selector → VCR 1 / VCR 2 |
| a video tape of VCR 4 | INPUT SELECT: 4<br>REC MODE: SOURCE | VCR 4 → selector → VCR 1 / VCR 2 / VCR 3 |
| videodisc | INPUT SELECT: 5<br>REC MODE: SOURCE | videodisc → selector → VCR 1 / VCR 2 / VCR 3 |

You can monitor the programs being recorded, if a TV set is connected to the VHF OUT of each VCR.



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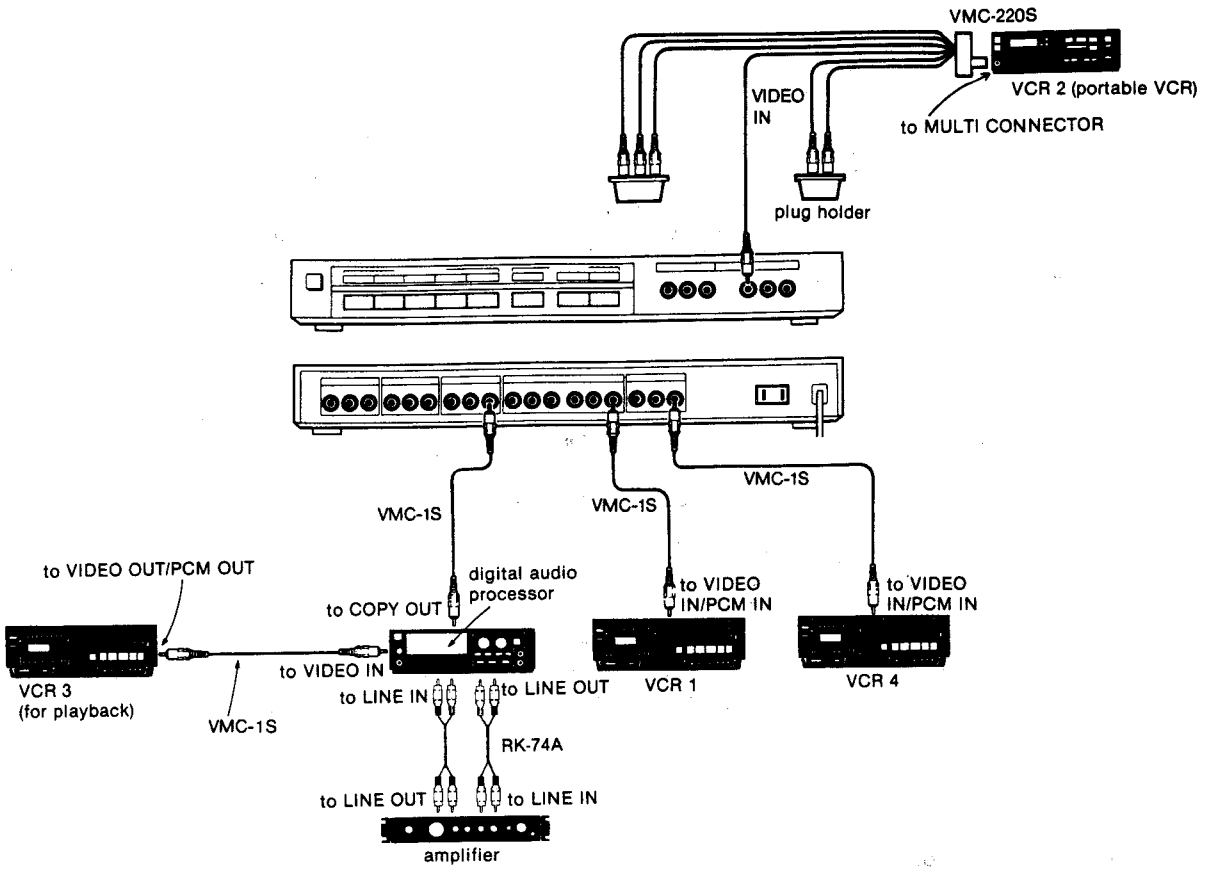
**CONNECTING AUDIO EQUIPMENT**

Using a digital audio processor, one VCR for playback and three VCRs for recording, you can make digital tape copy on three VCRs simultaneously.



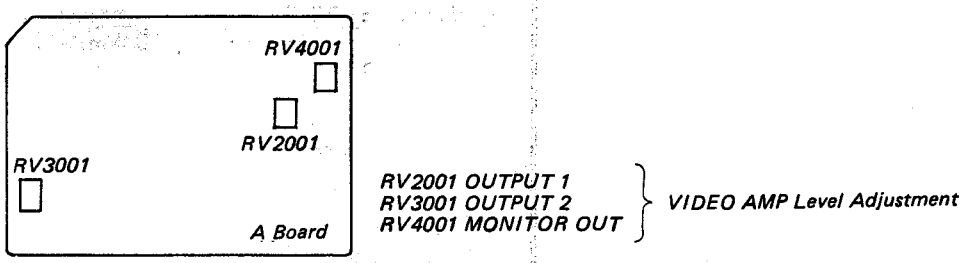

**Operation**

- Check that the PCM switch of the VCR being used to record is set to PCM.
- Be sure to set the COPY switch of the digital audio processor to ON.
- Press the POWER switch of the selector on. The INPUT SELECT 3 and REC MODE SOURCE are automatically set and recording will begin.

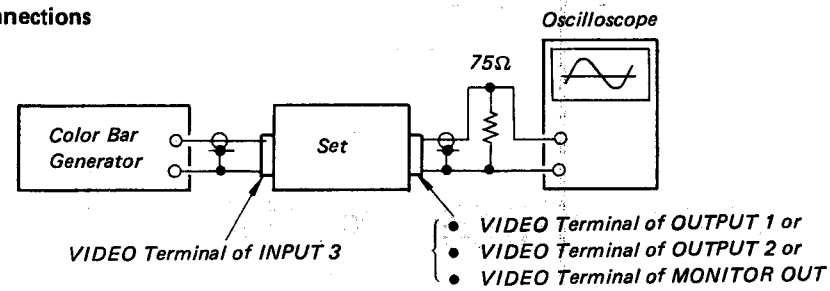
# SECTION 2
# ELECTRICAL ADJUSTMENT

**– Video AMP Level Adjustment –**

**Adjustment Location**




**Connections**




**Procedures**

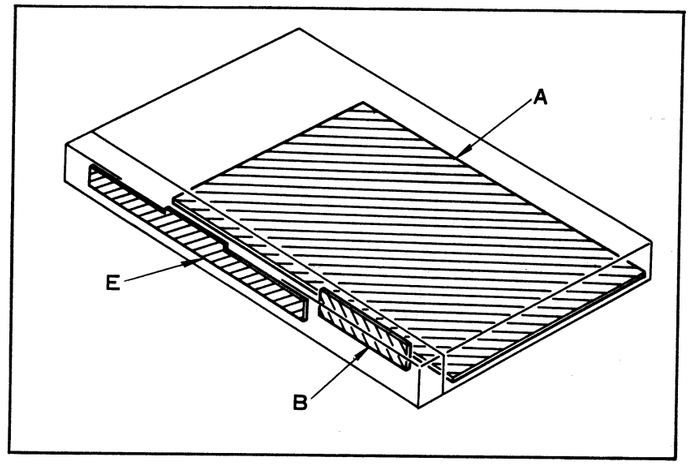
1) Apply a 1 Vp-p video signal to INPUT 3 VIDEO Terminal from the Color Bar Generator.
2) Set the INPUT SELECT BUTTON to "3", and the REC MODE BUTTON to "SOURCE".
3) Adjust RV2001 with output from the OUTPUT 1 VIDEO Termianl, RV3001 with output from the OUTPUT 2 VIDEO Terminal, and RV4001 with output from the MONITOR OUT VIDEO Terminal for 1.0V ± 0.03Vp-p reading on the oscilloscope.

**[Caution on checking]**

When removing the upper case of the set, grip the both ends of the upper case and open the upper case outwards.

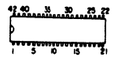
# SECTION 3
# DIAGRAMS

## 3-1. CIRCUIT BOARDS LOCATION

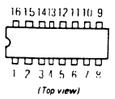



## 3-2. SEMICONDUCTORS

**CX564-04**

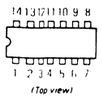



**TC4049BP**
**TC5020BP**




**μPC4558C**

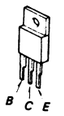
**TC4066BP**



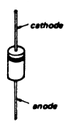

**2SA1175**

**2SC2458**

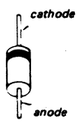
**2SB834**
**2SD880**



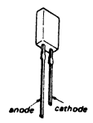

**10E2**




**1S1555**
**HZ4B2**
**HZ6C3L**

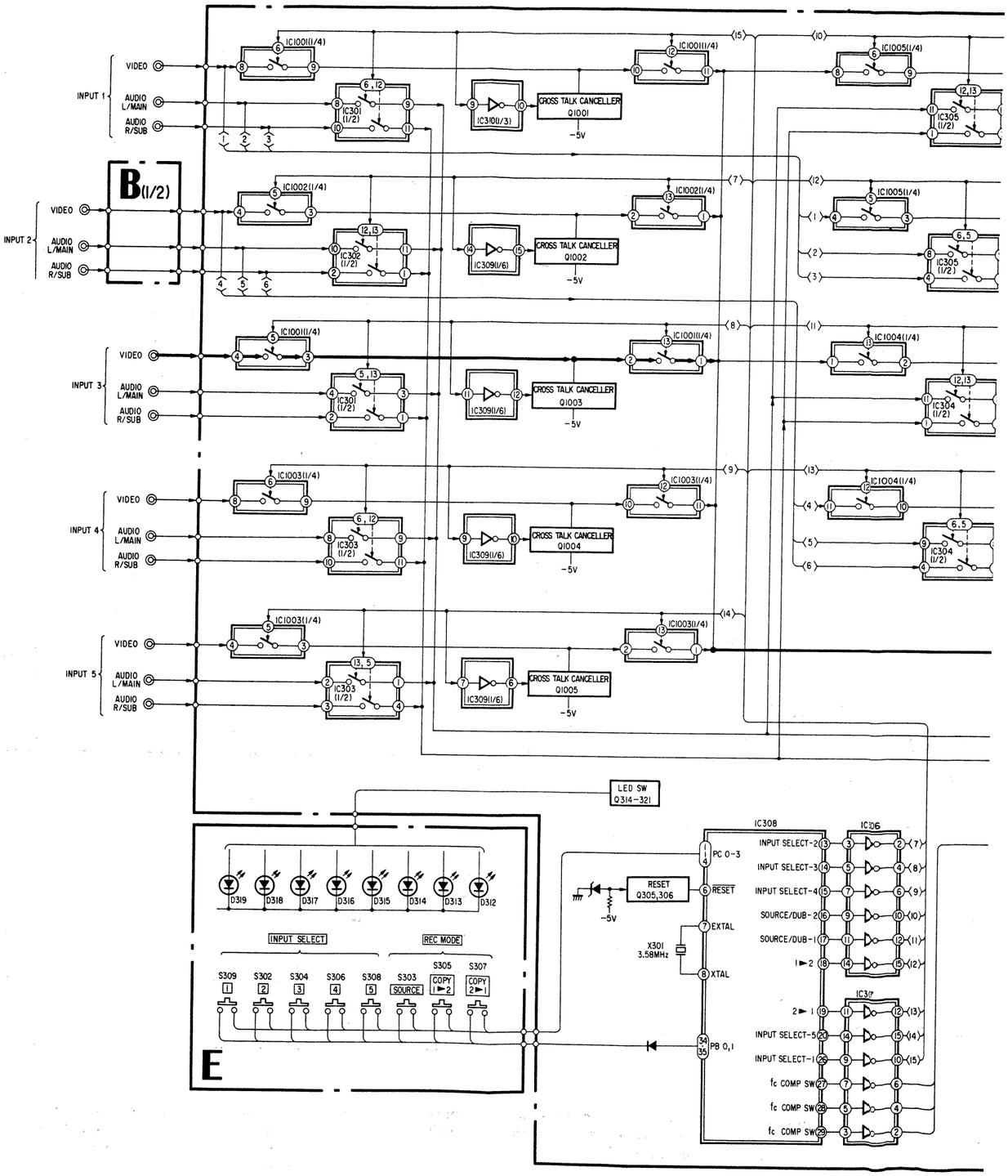



**GL9PR22**
**GL9NG22**

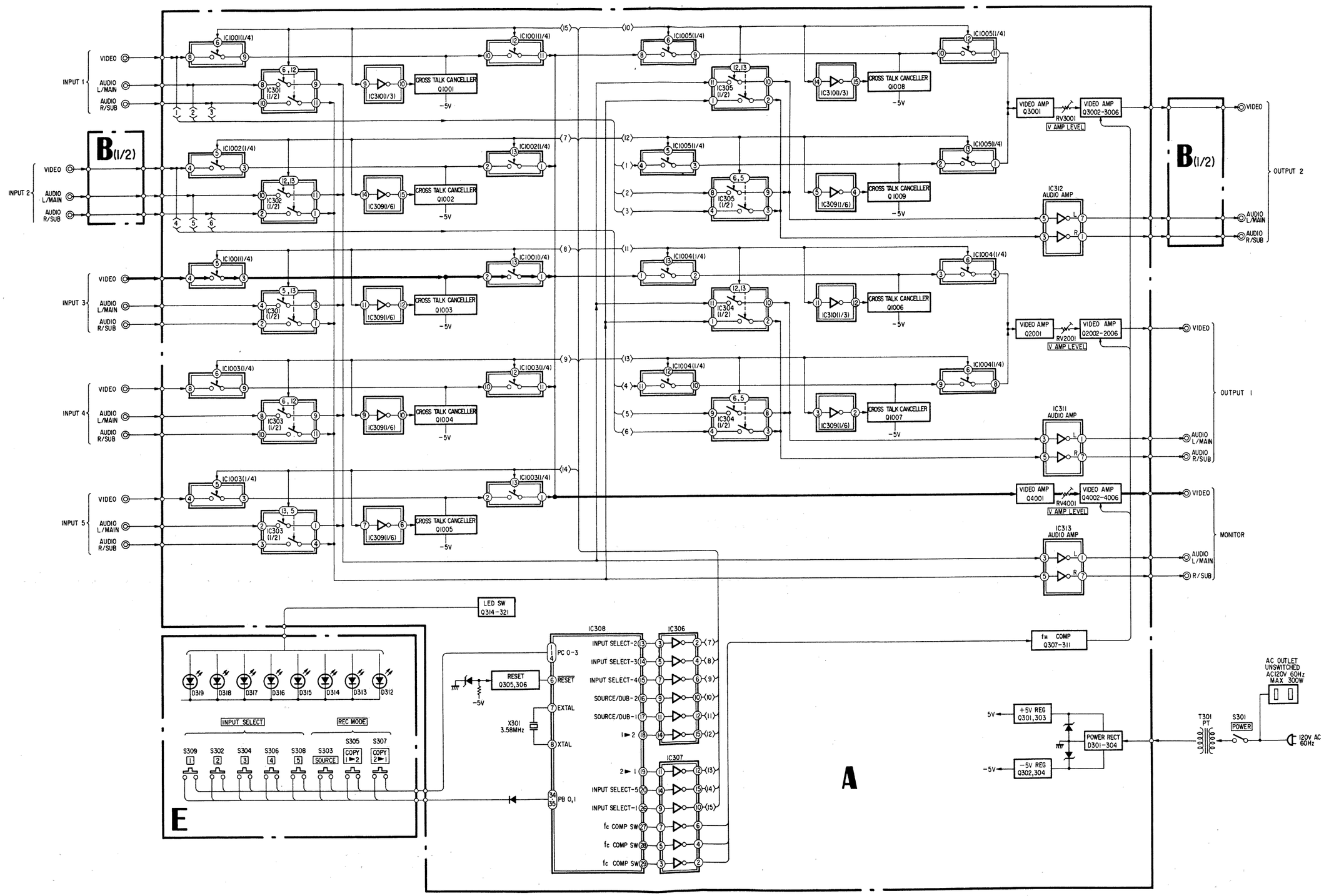




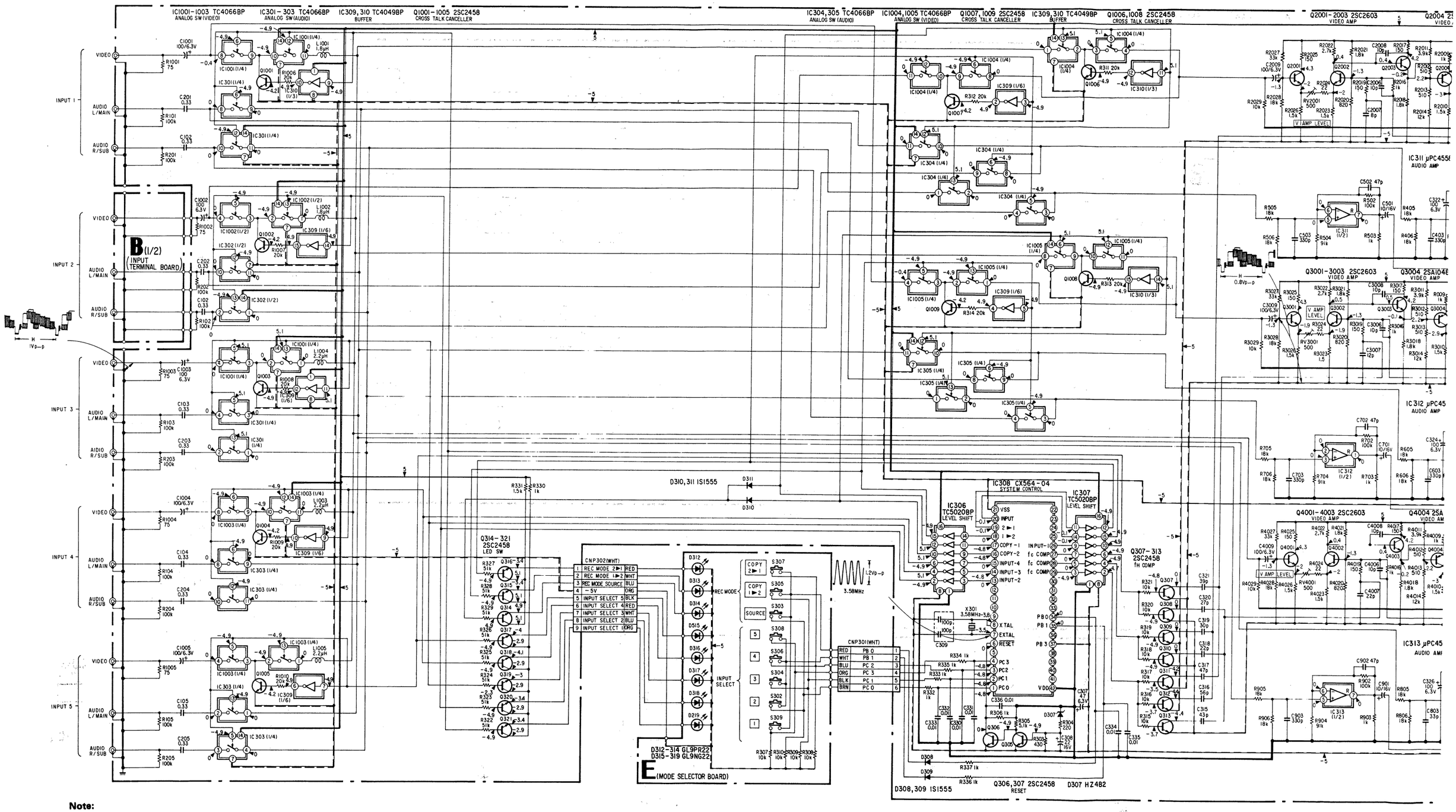

## 3-3. BLOCK DIAGRAM



## 3-3. BLOCK DIAGRAM



## 3-4. SCHEMATIC DIAGRAM

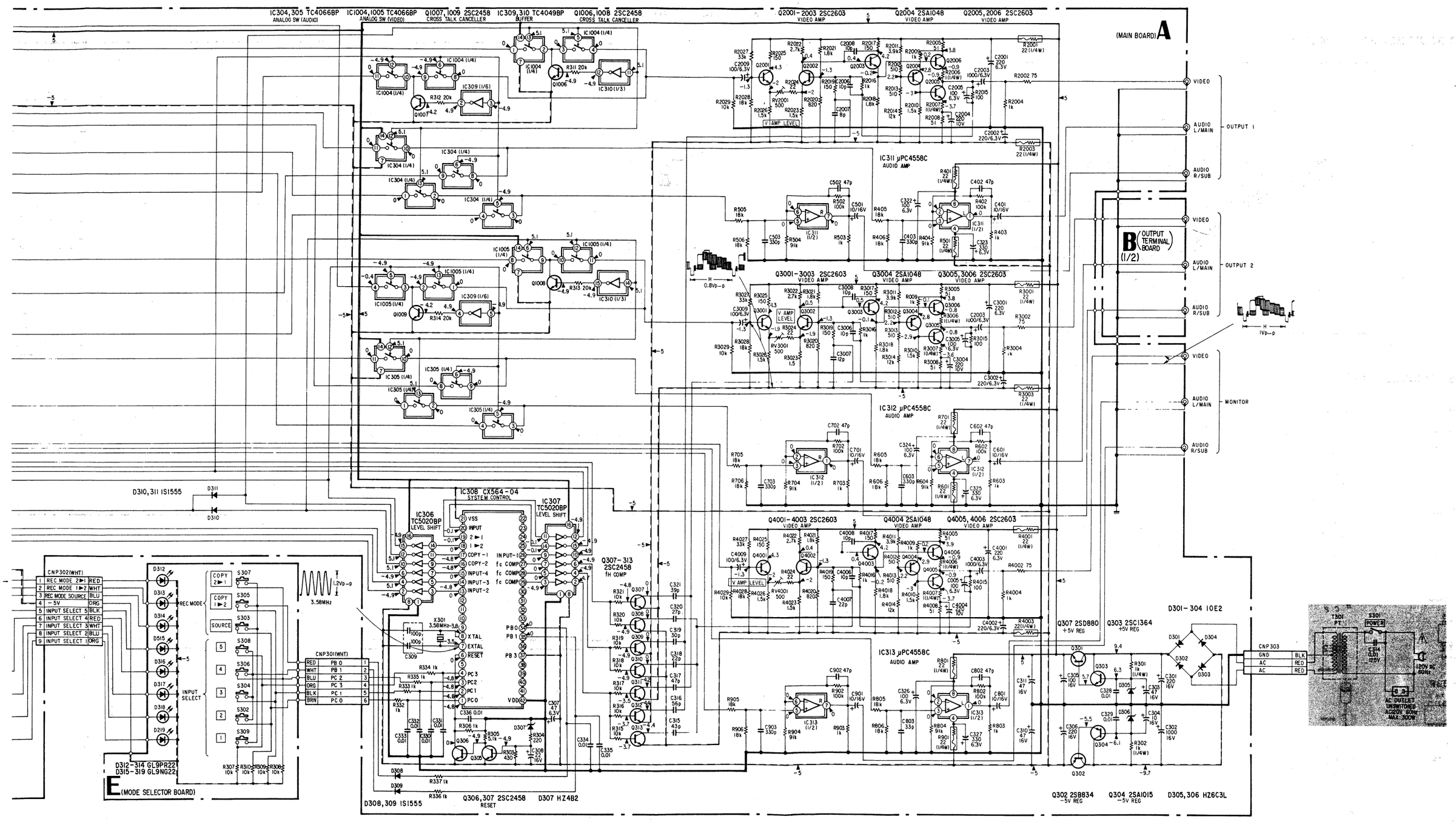



**Note:**

- All capacitors are in μF unless otherwise noted. 50WV or less are not indicated except for electrolytics. p : μμF
- All resistors are in ohms. 1/6 W unless otherwise noted. kΩ : 1000Ω, MΩ : 1000 kΩ
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⏦ : fusible resistor.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a color-bar signal input. Readings are taken with a 10MΩ digital multimeter.
- Voltage variations may be noted due to normal production tolerances.
- ▭ : adjustment for repair.
- ——: B+ bus.
- – – –: B- bus.

**Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.**

**Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.**




unless otherwise

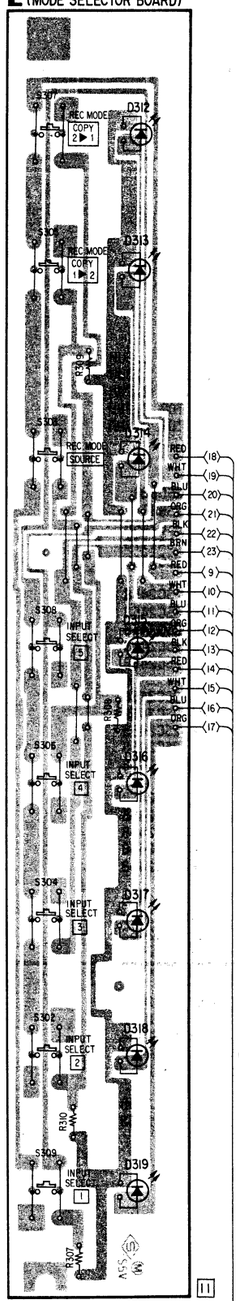
input.
ultimeter.
normal produc-

**Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.**

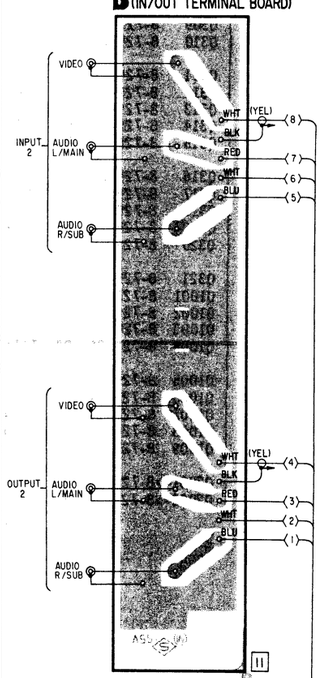
**Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.**

## 3-5. PRINTED WIRING BOARD

**E** (MODE SELECTOR BOARD)

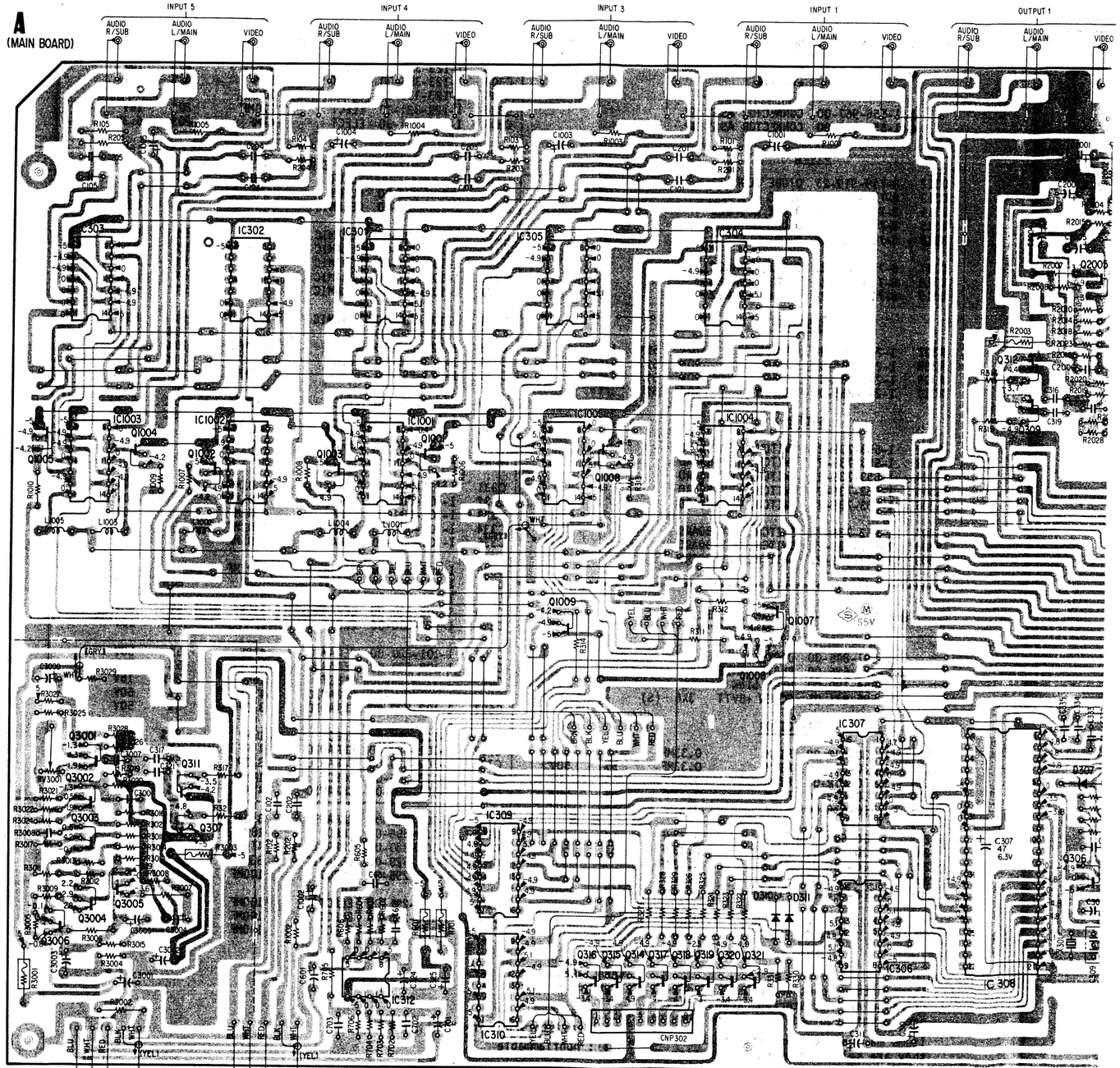

S307 REC MODE COPY 2▶1 D312
S310 REC MODE COPY 1▶2 D313
S311 REC MODE SOURCE D314
S308 INPUT SELECT 5 D315
S305 INPUT SELECT 4 D316
S309 INPUT SELECT 3 D317
S302 INPUT SELECT 2 D318
S303 INPUT SELECT 1 D319
R307
R310
(18) (19) (20) (21) (22) (23) (9) (10) (11) (12) (13) (14) (15) (16) (17)
11

**B** (IN/OUT TERMINAL BOARD)

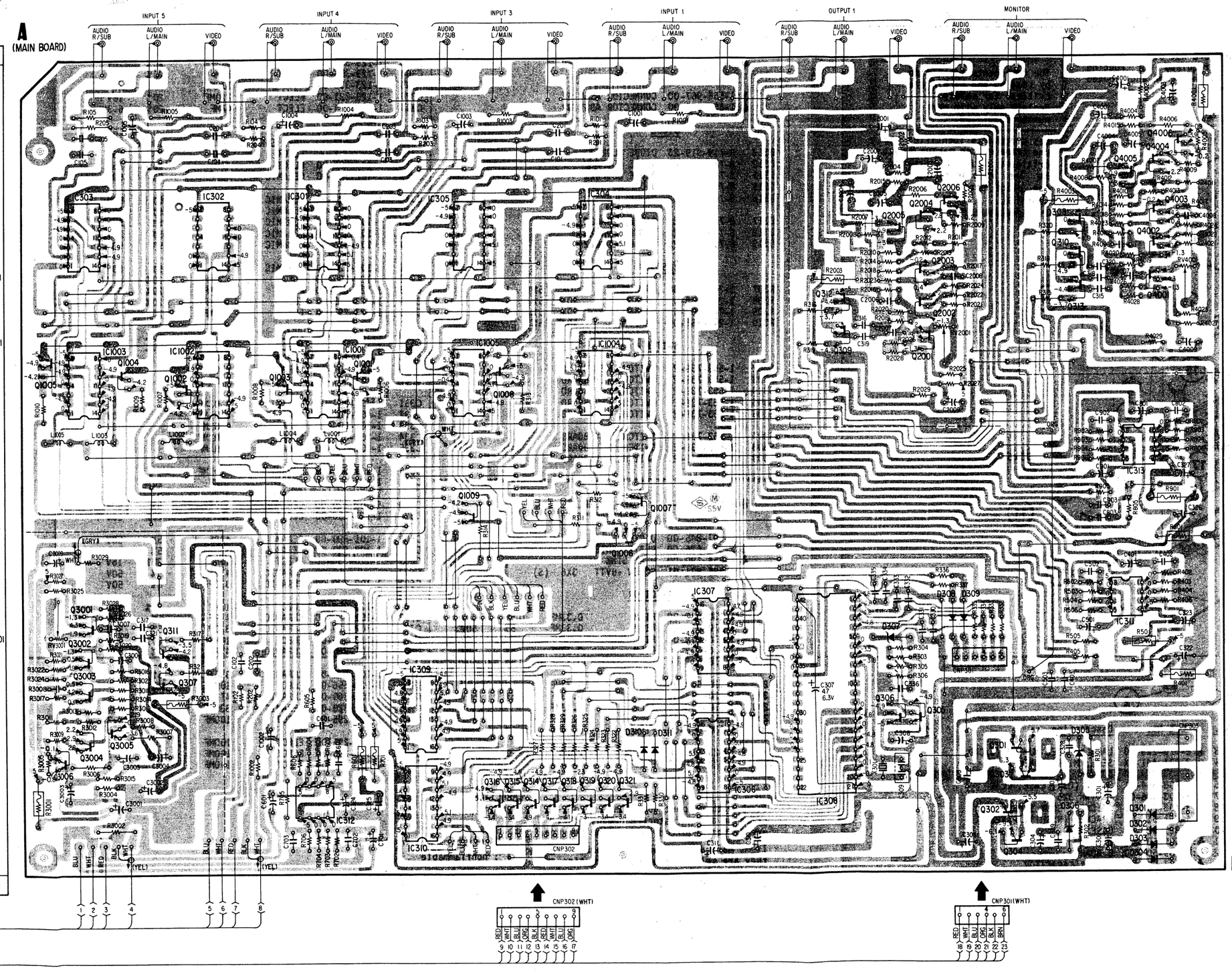



| Q , IC | D | ADJ |
|---|---|---|
| 4006 | | |
| 4004 | | |
| 4005 | | |
| 2006 | | |
| 2004 | 4003 | |
| IC303 IC302 IC301 IC305 IC304 2005 | 308 | |
| 4002 | | |
| 310 | | |
| 2003 | | RV4001 |
| 4001 | | |
| 313 | | |
| 312 2002 | | |
| 309 2001 | | RV2001 |
| 1005 | | |
| 1004 1001 1008 | | |
| IC003 IC1002 IC1001 IC1005 IC1004 | | |
| 1002 1003 | | |
| IC313 | | |
| 1007 | | |
| 1009 | | |
| 1006 | | |
| IC311 | 308,309 | |
| 3001 | | RV3001 |
| IC307 | 307 | |
| 311 | | |
| 3002 | | |
| 307 | | |
| 3003 | | |
| IC308 | | |
| IC309 | 306,305 | |
| 3005 | | |
| 3004 | | |
| 3006 IC306 | 301 | 310,311 |
| | 303 | 305 |
| IC312 IC310 314 — 321 | | |
| 302 | 301 | |
| | 306 302 | |
| 304 | 303 | |
| | 304 | |
| Q , IC | D | ADJ |

**A** (MAIN BOARD)



**A**
(MAIN BOARD)




**Note:**

- : B+ pattern
- : B- pattern

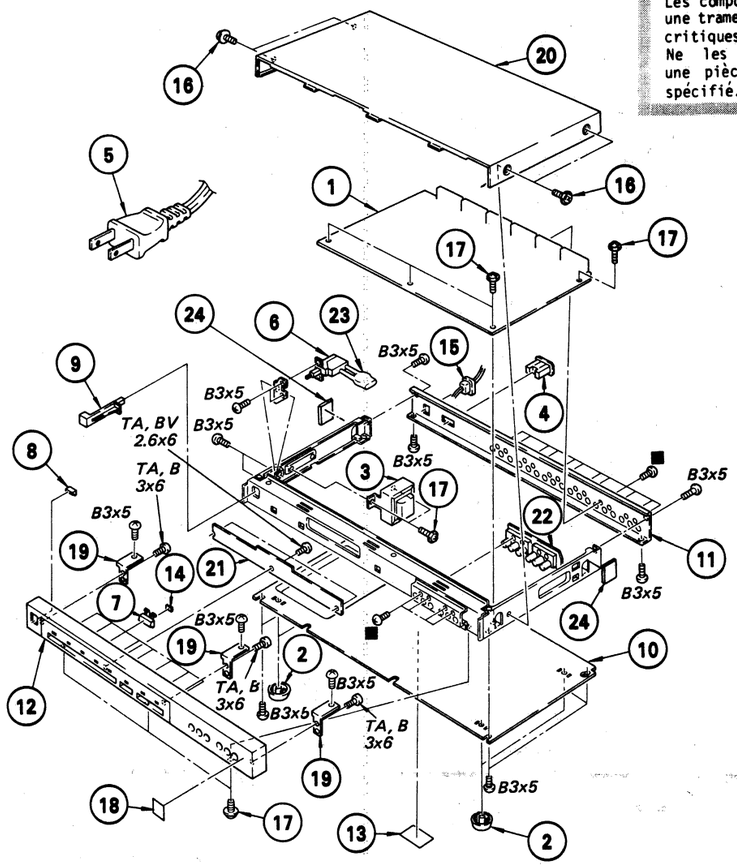
# SECTION 4
# EXPLODED VIEW

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ⚫ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

**The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.**

**Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.**

■ : TA, BV3x8




| No. | Part No. | Description | Remark |
|---|---|---|---|
| 1 | ⚫ A-6766-024-A | A BOARD, COMPLETE | |
| 2 | X-3701-069-0 | FOOT ASSY, M.F | |
| 3 | ⚠ 1-447-619-00 | TRANSFORMER, POWER | |
| 4 | ⚠ 1-561-347-00 | OUTLET, AC | |
| 5 | ⚠ 1-551-478-00 | CORD, POWER | |
| 6 | ⚠ 1-553-314-00 | SWITCH, PUSH (AC POWER) | |
| 7 | 2-374-613-00 | KNOB, PUSH | |
| 8 | 2-374-616-00 | ESCUTCHEON, POWER KNOB | |
| 9 | 2-374-617-02 | KNOB, POWER | |
| 10 | ⚫ 2-374-619-00 | PLATE, BOTTOM | |
| 11 | 2-374-621-11 | PLATE, JACK | |
| 12 | 2-374-622-31 | PANEL, FRONT | |
| 13 | ⚫ 2-375-229-00 | LABEL, MODEL NUMBER (U/CND) | |
| 14 | 3-831-441-XX | SEAL, MICROPHONE | |
| 15 | ⚠ 3-703-241-00 | BUSHING, CORD | |
| 16 | 3-703-354-11 | SCREW (OS), CASE, CLAW | |
| 17 | 3-703-486-00 | +PTTWH 3X5 | |
| 18 | 3-703-707-01 | STICKER, SONY SYMBOL (21) | |
| 19 | ⚫ 4-881-517-00 | BRACKET (RIGHT), PANEL | |
| 20 | 4-881-528-00 | CASE | |
| 21 | ⚫ 1-609-509-00 | E BOARD | |
| 22 | ⚫ 1-609-506-00 | B BOARD | |
| 23 | ⚫ 3-587-924-00 | COVER, CAPACITOR | |
| 24 | 3-538-026-00 | CUSHION | |

SCREW

| | | | |
|---|---|---|---|
| 7-685-533-19 | SCREW +BTP | 2.6X6 | TYPE2 N-S |
| 7-685-545-19 | SCREW +BTP | 3X6 | TYPE2 N-S |
| 7-685-646-79 | SCREW +BVTP | 3X8 | TYPE2 IT-3 |
| 7-685-870-01 | SCREW +BVTT | 3X5 | (S) |



# SECTION 5
# ELECTRICAL PARTS LIST

E A A

| Ref.No. | Part No. | Description | Remark |
|---|---|---|---|
| | ⚫:1-609-509-00 | E BOARD | |
| | | ******* | |
| | ⚫:1-556-967-00 | CONNECTOR ASSY 6P | |
| | ⚫:1-556-968-00 | CONNECTOR ASSY 9P | |
| | | DIODE | |
| D312 | 8-719-919-23 | DIODE GL9PR22 | |
| D313 | 8-719-919-23 | DIODE GL9PR22 | |
| D314 | 8-719-919-23 | DIODE GL9PR22 | |
| D315 | 8-719-919-22 | DIODE GL9NG22 | |
| D316 | 8-719-919-22 | DIODE GL9NG22 | |
| D317 | 8-719-919-22 | DIODE GL9NG22 | |
| D318 | 8-719-919-22 | DIODE GL9NG22 | |
| D319 | 8-719-919-22 | DIODE GL9NG22 | |
| | | RESISTOR | |
| R307 | 1-247-855-00 | CARBON 10K 5% 1/6W | |
| R308 | 1-247-855-00 | CARBON 10K 5% 1/6W | |
| R309 | 1-247-855-00 | CARBON 10K 5% 1/6W | |
| R310 | 1-247-855-00 | CARBON 10K 5% 1/6W | |
| | | SWITCH | |
| S302 | 1-553-739-21 | SWITCH, KEY BOARD | |
| S303 | 1-553-739-21 | SWITCH, KEY BOARD | |
| S304 | 1-553-739-21 | SWITCH, KEY BOARD | |
| S305 | 1-553-739-21 | SWITCH, KEY BOARD | |
| S306 | 1-553-739-21 | SWITCH, KEY BOARD | |
| S307 | 1-553-739-21 | SWITCH, KEY BOARD | |
| S308 | 1-553-739-21 | SWITCH, KEY BOARD | |
| S309 | 1-553-739-21 | SWITCH, KEY BOARD | |
| ********** | | | |
| | ⚫:A-6766-024-A | A BOARD, COMPLETE | |
| | | ********** | |
| | 1-507-845-00 | JACK, PIN (A) | |
| | ⚫:2-374-626-00 | PLATE, SHIELD | |
| | ⚫:4-854-790-00 | HEAT SINK | |
| | 7-685-871-01 | SCREW +BVTT 3X6 (S) | |
| | | CAPACITOR | |
| C101 | 1-130-638-00 | FILM 0.33MF 5% 50V | |
| C102 | 1-130-638-00 | FILM 0.33MF 5% 50V | |
| C103 | 1-130-638-00 | FILM 0.33MF 5% 50V | |
| C104 | 1-130-638-00 | FILM 0.33MF 5% 50V | |
| C105 | 1-130-638-00 | FILM 0.33MF 5% 50V | |
| C201 | 1-130-638-00 | FILM 0.33MF 5% 50V | |
| C202 | 1-130-638-00 | FILM 0.33MF 5% 50V | |
| C203 | 1-130-638-00 | FILM 0.33MF 5% 50V | |
| C204 | 1-130-638-00 | FILM 0.33MF 5% 50V | |
| C205 | 1-130-638-00 | FILM 0.33MF 5% 50V | |
| C301 | 1-123-321-00 | ELECT 220MF 20% 16V | |
| C302 | 1-123-324-00 | ELECT 1000MF 20% 16V | |
| C303 | 1-123-332-00 | ELECT 47MF 20% 16V | |
| C304 | 1-123-356-00 | ELECT 10MF 20% 16V | |
| C305 | 1-123-333-00 | ELECT 100MF 20% 16V | |
| C306 | 1-123-321-00 | ELECT 220MF 20% 16V | |
| C307 | 1-123-294-00 | ELECT 47MF 20% 6.3V | |
| C308 | 1-123-330-00 | ELECT 22MF 20% 16V | |
| C309 | 1-231-702-00 | CAP, EANCAPSULATED 100PF/100PF | |
| C310 | 1-123-332-00 | ELECT 47MF 20% 16V | |
| C311 | 1-123-332-00 | ELECT 47MF 20% 16V | |
| C315 | 1-102-521-00 | CERAMIC 43PF 5% 50V | |
| C316 | 1-102-523-00 | CERAMIC 56PF 5% 50V | |
| C317 | 1-102-852-00 | CERAMIC 47PF 5% 50V | |
| C318 | 1-102-514-00 | CERAMIC 22PF 5% 50V | |
| C319 | 1-102-517-00 | CERAMIC 30PF 5% 50V | |
| C320 | 1-102-516-00 | CERAMIC 27PF 5% 50V | |
| C321 | 1-102-520-00 | CERAMIC 39PF 5% 50V | |
| C322 | 1-123-295-00 | ELECT 100MF 20% 6.3V | |
| C323 | 1-123-297-00 | ELECT 330MF 20% 6.3V | |
| C324 | 1-123-295-00 | ELECT 100MF 20% 6.3V | |
| C325 | 1-123-297-00 | ELECT 330MF 20% 6.3V | |
| C326 | 1-123-295-00 | ELECT 100MF 20% 6.3V | |
| C327 | 1-123-297-00 | ELECT 330MF 20% 6.3V | |
| C328 | 1-101-004-00 | CERAMIC 0.01MF 50V | |
| C329 | 1-101-004-00 | CERAMIC 0.01MF 50V | |
| C330 | 1-101-004-00 | CERAMIC 0.01MF 50V | |
| C331 | 1-101-004-00 | CERAMIC 0.01MF 50V | |
| C332 | 1-101-004-00 | CERAMIC 0.01MF 50V | |
| C333 | 1-101-004-00 | CERAMIC 0.01MF 50V | |
| C334 | 1-101-004-00 | CERAMIC 0.01MF 50V | |
| C335 | 1-101-004-00 | CERAMIC 0.01MF 50V | |
| C336 | 1-101-004-00 | CERAMIC 0.01MF 50V | |
| C401 | 1-123-356-00 | ELECT 10MF 20% 16V | |
| C402 | 1-101-880-00 | CERAMIC 47PF 5% 50V | |
| C403 | 1-102-820-00 | CERAMIC 330PF 5% 50V | |
| C501 | 1-123-356-00 | ELECT 10MF 20% 16V | |
| C502 | 1-101-880-00 | CERAMIC 47PF 5% 50V | |
| C503 | 1-102-820-00 | CERAMIC 330PF 5% 50V | |
| C601 | 1-123-356-00 | ELECT 10MF 20% 16V | |
| C602 | 1-101-880-00 | CERAMIC 47PF 5% 50V | |
| C603 | 1-102-820-00 | CERAMIC 330PF 5% 50V | |
| C701 | 1-123-356-00 | ELECT 10MF 20% 16V | |
| C702 | 1-101-880-00 | CERAMIC 47PF 5% 50V | |
| C703 | 1-102-820-00 | CERAMIC 330PF 5% 50V | |
| C801 | 1-123-356-00 | ELECT 10MF 20% 16V | |
| C802 | 1-101-880-00 | CERAMIC 47PF 5% 50V | |
| C803 | 1-102-820-00 | CERAMIC 330PF 5% 50V | |
| C901 | 1-123-356-00 | ELECT 10MF 20% 16V | |
| C902 | 1-101-880-00 | CERAMIC 47PF 5% 50V | |
| C903 | 1-102-820-00 | CERAMIC 330PF 5% 50V | |
| C1001 | 1-123-295-00 | ELECT 100MF 20% 6.3V | |
| C1002 | 1-123-295-00 | ELECT 100MF 20% 6.3V | |
| C1003 | 1-123-295-00 | ELECT 100MF 20% 6.3V | |
| C1004 | 1-123-295-00 | ELECT 100MF 20% 6.3V | |

| Ref.No. | P. |
|---|---|
| C1005 | 1 |
| C2001 | 1 |
| C2002 | 1 |
| C2003 | 1 |
| C2004 | 1 |
| C2005 | 1 |
| C2006 | 1 |
| C2007 | 1 |
| C2008 | 1 |
| C2009 | 1 |
| C3001 | 1 |
| C3002 | 1 |
| C3003 | 1 |
| C3004 | 1 |
| C3005 | 1 |
| C3006 | 1 |
| C3007 | 1 |
| C3008 | 1 |
| C3009 | 1 |
| C4001 | 1 |
| C4002 | 1 |
| C4003 | 1 |
| C4004 | 1 |
| C4005 | 1 |
| C4006 | 1 |
| C4007 | 1 |
| C4008 | 1 |
| C4009 | 1 |
| ⚫CNP301: | |
| ⚫CNP302: | |
| ⚫CNP303: | |
| D301 | |
| D302 | |
| D304 | |
| D305 | |
| D306 | |
| D307 | |
| D308 | |
| D309 | |
| D310 | |
| D311 | |
| IC301 | |
| IC302 | |
| IC303 | |
| IC304 | |
| IC305 | |
| IC306 | |

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- Items marked " ⚫ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

CAPACITORS:
MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

# SECTION 5
# ELECTRICAL PARTS LIST

E A A

| Ref.No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| ♦:1-609-509-00 | E BOARD | | | | |
| | ******* | | | | |
| ♦:1-556-967-00 | CONNECTOR ASSY 6P | | | | |
| ♦:1-556-968-00 | CONNECTOR ASSY 9P | | | | |
| | **DIODE** | | | | |
| D312 | 8-719-919-23 | DIODE GL9PR22 | | | |
| D313 | 8-719-919-23 | DIODE GL9PR22 | | | |
| D314 | 8-719-919-23 | DIODE GL9PR22 | | | |
| D315 | 8-719-919-22 | DIODE GL9NG22 | | | |
| D316 | 8-719-919-22 | DIODE GL9NG22 | | | |
| D317 | 8-719-919-22 | DIODE GL9NG22 | | | |
| D318 | 8-719-919-22 | DIODE GL9NG22 | | | |
| D319 | 8-719-919-22 | DIODE GL9NG22 | | | |
| | **RESISTOR** | | | | |
| R307 | 1-247-855-00 | CARBON | 10K | 5% 1/6W | |
| R308 | 1-247-855-00 | CARBON | 10K | 5% 1/6W | |
| R309 | 1-247-855-00 | CARBON | 10K | 5% 1/6W | |
| R310 | 1-247-855-00 | CARBON | 10K | 5% 1/6W | |
| | **SWITCH** | | | | |
| S302 | 1-553-739-21 | SWITCH, KEY BOARD | | | |
| S303 | 1-553-739-21 | SWITCH, KEY BOARD | | | |
| S304 | 1-553-739-21 | SWITCH, KEY BOARD | | | |
| S305 | 1-553-739-21 | SWITCH, KEY BOARD | | | |
| S306 | 1-553-739-21 | SWITCH, KEY BOARD | | | |
| S307 | 1-553-739-21 | SWITCH, KEY BOARD | | | |
| S308 | 1-553-739-21 | SWITCH, KEY BOARD | | | |
| S309 | 1-553-739-21 | SWITCH, KEY BOARD | | | |
| ********** | | | | | |
| ♦:A-6766-024-A | A BOARD, COMPLETE | | | | |
| | ********** | | | | |
| 1-507-845-00 | JACK, PIN (A) | | | | |
| ♦:2-374-626-00 | PLATE, SHIELD | | | | |
| ♦:4-854-790-00 | HEAT SINK | | | | |
| 7-685-871-01 | SCREW +BVTT 3X6 (S) | | | | |
| | **CAPACITOR** | | | | |
| C101 | 1-130-638-00 | FILM | 0.33MF | 5% 50V | |
| C102 | 1-130-638-00 | FILM | 0.33MF | 5% 50V | |
| C103 | 1-130-638-00 | FILM | 0.33MF | 5% 50V | |
| C104 | 1-130-638-00 | FILM | 0.33MF | 5% 50V | |
| C105 | 1-130-638-00 | FILM | 0.33MF | 5% 50V | |
| C201 | 1-130-638-00 | FILM | 0.33MF | 5% 50V | |
| C202 | 1-130-638-00 | FILM | 0.33MF | 5% 50V | |
| C203 | 1-130-638-00 | FILM | 0.33MF | 5% 50V | |
| C204 | 1-130-638-00 | FILM | 0.33MF | 5% 50V | |
| C205 | 1-130-638-00 | FILM | 0.33MF | 5% 50V | |
| C301 | 1-123-321-00 | ELECT | 220MF | 20% 16V | |
| C302 | 1-123-324-00 | ELECT | 1000MF | 20% 16V | |
| C303 | 1-123-332-00 | ELECT | 47MF | 20% 16V | |
| C304 | 1-123-356-00 | ELECT | 10MF | 20% 16V | |
| C305 | 1-123-333-00 | ELECT | 100MF | 20% 16V | |
| C306 | 1-123-321-00 | ELECT | 220MF | 20% 16V | |
| C307 | 1-123-294-00 | ELECT | 47MF | 20% 6.3V | |
| C308 | 1-123-330-00 | ELECT | 22MF | 20% 16V | |
| C309 | 1-231-702-00 | CAP, EANCAPSULATED 100PF/100PF | | | |
| C310 | 1-123-332-00 | ELECT | 47MF | 20% 16V | |
| C311 | 1-123-332-00 | ELECT | 47MF | 20% 16V | |
| C315 | 1-102-521-00 | CERAMIC | 43PF | 5% 50V | |
| C316 | 1-102-523-00 | CERAMIC | 56PF | 5% 50V | |
| C317 | 1-102-852-00 | CERAMIC | 47PF | 5% 50V | |
| C318 | 1-102-514-00 | CERAMIC | 22PF | 5% 50V | |
| C319 | 1-102-517-00 | CERAMIC | 30PF | 5% 50V | |
| C320 | 1-102-516-00 | CERAMIC | 27PF | 5% 50V | |
| C321 | 1-102-520-00 | CERAMIC | 39PF | 5% 50V | |
| C322 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C323 | 1-123-297-00 | ELECT | 330MF | 20% 6.3V | |
| C324 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C325 | 1-123-297-00 | ELECT | 330MF | 20% 6.3V | |
| C326 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C327 | 1-123-297-00 | ELECT | 330MF | 20% 6.3V | |
| C328 | 1-101-004-00 | CERAMIC | 0.01MF | 50V | |
| C329 | 1-101-004-00 | CERAMIC | 0.01MF | 50V | |
| C330 | 1-101-004-00 | CERAMIC | 0.01MF | 50V | |
| C331 | 1-101-004-00 | CERAMIC | 0.01MF | 50V | |
| C332 | 1-101-004-00 | CERAMIC | 0.01MF | 50V | |
| C333 | 1-101-004-00 | CERAMIC | 0.01MF | 50V | |
| C334 | 1-101-004-00 | CERAMIC | 0.01MF | 50V | |
| C335 | 1-101-004-00 | CERAMIC | 0.01MF | 50V | |
| C336 | 1-101-004-00 | CERAMIC | 0.01MF | 50V | |
| C401 | 1-123-356-00 | ELECT | 10MF | 20% 16V | |
| C402 | 1-101-880-00 | CERAMIC | 47PF | 5% 50V | |
| C403 | 1-102-820-00 | CERAMIC | 330PF | 5% 50V | |
| C501 | 1-123-356-00 | ELECT | 10MF | 20% 16V | |
| C502 | 1-101-880-00 | CERAMIC | 47PF | 5% 50V | |
| C503 | 1-102-820-00 | CERAMIC | 330PF | 5% 50V | |
| C601 | 1-123-356-00 | ELECT | 10MF | 20% 16V | |
| C602 | 1-101-880-00 | CERAMIC | 47PF | 5% 50V | |
| C603 | 1-102-820-00 | CERAMIC | 330PF | 5% 50V | |
| C701 | 1-123-356-00 | ELECT | 10MF | 20% 16V | |
| C702 | 1-101-880-00 | CERAMIC | 47PF | 5% 50V | |
| C703 | 1-102-820-00 | CERAMIC | 330PF | 5% 50V | |
| C801 | 1-123-356-00 | ELECT | 10MF | 20% 16V | |
| C802 | 1-101-880-00 | CERAMIC | 47PF | 5% 50V | |
| C803 | 1-102-820-00 | CERAMIC | 330PF | 5% 50V | |
| C901 | 1-123-356-00 | ELECT | 10MF | 20% 16V | |
| C902 | 1-101-880-00 | CERAMIC | 47PF | 5% 50V | |
| C903 | 1-102-820-00 | CERAMIC | 330PF | 5% 50V | |
| C1001 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C1002 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C1003 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C1004 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C1005 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C2001 | 1-123-296-00 | ELECT | 220MF | 20% 6.3V | |
| C2002 | 1-123-296-00 | ELECT | 220MF | 20% 6.3V | |
| C2003 | 1-123-299-00 | ELECT | 1000MF | 20% 6.3V | |
| C2004 | 1-123-308-00 | ELECT | 220MF | 20% 10V | |
| C2005 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C2006 | 1-102-508-00 | CERAMIC | 10PF | 0.5PF 50V | |
| C2007 | 1-102-865-00 | CERAMIC | 8PF | 0.5PF 50V | |
| C2008 | 1-102-508-00 | CERAMIC | 10PF | 0.5PF 50V | |
| C2009 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C3001 | 1-123-296-00 | ELECT | 220MF | 20% 6.3V | |
| C3002 | 1-123-296-00 | ELECT | 220MF | 20% 6.3V | |
| C3003 | 1-123-299-00 | ELECT | 1000MF | 20% 6.3V | |
| C3004 | 1-123-308-00 | ELECT | 220MF | 20% 10V | |
| C3005 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C3006 | 1-102-508-00 | CERAMIC | 10PF | 0.5PF 50V | |
| C3007 | 1-102-510-00 | CERAMIC | 12PF | 5% 50V | |
| C3008 | 1-102-508-00 | CERAMIC | 10PF | 0.5PF 50V | |
| C3009 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C4001 | 1-123-296-00 | ELECT | 220MF | 20% 6.3V | |
| C4002 | 1-123-296-00 | ELECT | 220MF | 20% 6.3V | |
| C4003 | 1-123-299-00 | ELECT | 1000MF | 20% 6.3V | |
| C4004 | 1-123-308-00 | ELECT | 220MF | 20% 10V | |
| C4005 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| C4006 | 1-102-508-00 | CERAMIC | 10PF | 0.5PF 50V | |
| C4007 | 1-102-514-00 | CERAMIC | 22PF | 5% 50V | |
| C4008 | 1-102-508-00 | CERAMIC | 10PF | 0.5PF 50V | |
| C4009 | 1-123-295-00 | ELECT | 100MF | 20% 6.3V | |
| | **PLUG** | | | | |
| ♦CNP301:1-560-064-00 | PIN, CONNECTOR 6P | | | | |
| ♦CNP302:1-560-339-00 | PIN, CONNECTOR 9P | | | | |
| ♦CNP303:1-535-136-00 | BASE POST 14MM (10MM PITCH) 3P | | | | |
| | **DIODE** | | | | |
| D301 | 8-719-200-02 | DIODE 10E-2 | | | |
| D302 | 8-719-200-02 | DIODE 10E-2 | | | |
| D304 | 8-719-200-02 | DIODE 10E-2 | | | |
| D305 | 8-719-910-69 | DIODE HZ6C3L | | | |
| D306 | 8-719-910-69 | DIODE HZ6C3L | | | |
| D307 | 8-719-901-42 | DIODE HZ4B2 | | | |
| D308 | 8-719-815-55 | DIODE 1S1555 | | | |
| D309 | 8-719-815-55 | DIODE 1S1555 | | | |
| D310 | 8-719-815-55 | DIODE 1S1555 | | | |
| D311 | 8-719-815-55 | DIODE 1S1555 | | | |
| | **IC** | | | | |
| IC301 | 8-759-240-66 | IC TC4066BP | | | |
| IC302 | 8-759-240-66 | IC TC4066BP | | | |
| IC303 | 8-759-240-66 | IC TC4066BP | | | |
| IC304 | 8-759-240-66 | IC TC4066BP | | | |
| IC305 | 8-759-240-66 | IC TC4066BP | | | |
| IC306 | 8-759-250-20 | IC TC5020BP | | | |
| IC307 | 8-759-250-20 | IC TC5020BP | | | |
| IC308 | 8-755-640-40 | IC CX564-04 | | | |
| IC309 | 8-759-240-49 | IC TC4049BP | | | |
| IC310 | 8-759-240-49 | IC TC4049BP | | | |
| IC311 | 8-759-145-58 | IC UPC4558C | | | |
| IC312 | 8-759-145-58 | IC UPC4558C | | | |
| IC313 | 8-759-145-58 | IC UPC4558C | | | |
| IC1001 | 8-759-240-66 | IC TC4066BP | | | |
| IC1002 | 8-759-240-66 | IC TC4066BP | | | |
| IC1003 | 8-759-240-66 | IC TC4066BP | | | |
| IC1004 | 8-759-240-66 | IC TC4066BP | | | |
| IC1005 | 8-759-240-66 | IC TC4066BP | | | |
| | **COIL** | | | | |
| L1001 | 1-407-729-11 | MICRO INDUCTOR 1.8UH | | | |
| L1002 | 1-407-729-11 | MICRO INDUCTOR 1.8UH | | | |
| L1003 | 1-407-730-00 | MICRO INDUCTOR 2.2UH | | | |
| L1004 | 1-407-730-00 | MICRO INDUCTOR 2.2UH | | | |
| L1005 | 1-407-730-00 | MICRO INDUCTOR 2.2UH | | | |
| | **TRANSISTOR** | | | | |
| Q301 | 8-729-288-02 | TRANSISTOR 2SD880 | | | |
| Q302 | 8-729-283-42 | TRANSISTOR 2SB834 | | | |
| Q303 | =>8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q304 | =>8-729-117-54 | TRANSISTOR 2SA1175 | | | |
| Q305 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q306 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q307 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q308 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q309 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q310 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q311 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q312 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q313 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q314 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q315 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q316 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q317 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q318 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q319 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q320 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q321 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q1001 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q1002 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q1003 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q1004 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q1005 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q1006 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q1007 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q1008 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q1009 | 8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q2001 | =>8-729-245-83 | TRANSISTOR 2SC2458 | | | |
| Q2002 | =>8-729-245-83 | TRANSISTOR 2SC2458 | | | |

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

CAPACITORS:
MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH





MC-Service

| Ref.No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| Q2003=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| Q2004=>8-729-117-54 | | TRANSISTOR 2SA1175 | | | | |
| Q2005=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| Q2006=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| Q3001=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| Q3002=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| Q3003=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| Q3004=>8-729-117-54 | | TRANSISTOR 2SA1175 | | | | |
| Q3005=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| Q3006=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| Q4001=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| Q4002=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| Q4003=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| Q4004=>8-729-117-54 | | TRANSISTOR 2SA1175 | | | | |
| Q4005=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| Q4006=>8-729-245-83 | | TRANSISTOR 2SC2458 | | | | |
| | | RESISTOR | | | | |
| R101 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R102 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R103 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R104 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R105 | 1-246-521-00 | CARBON | 100K | 5% | 1/4W | |
| R201 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R202 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R203 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R204 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R205 | 1-246-521-00 | CARBON | 100K | 5% | 1/4W | |
| R301 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W | |
| R302 | 1-246-473-00 | CARBON | 1K | 5% | 1/4W | |
| R303 | 1-247-822-00 | CARBON | 430 | 5% | 1/6W | |
| R304 | 1-247-815-00 | CARBON | 220 | 5% | 1/6W | |
| R305 | 1-247-848-00 | CARBON | 5.1K | 5% | 1/6W | |
| R306 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R311 | 1-246-504-00 | CARBON | 20K | 5% | 1/4W | |
| R312 | 1-246-504-00 | CARBON | 20K | 5% | 1/4W | |
| R313 | 1-247-862-00 | CARBON | 20K | 5% | 1/6W | |
| R314 | 1-246-504-00 | CARBON | 20K | 5% | 1/4W | |
| R315 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W | |
| R316 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W | |
| R317 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W | |
| R318 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W | |
| R319 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W | |
| R320 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W | |
| R321 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W | |
| R322 | 1-247-872-00 | CARBON | 51K | 5% | 1/6W | |
| R323 | 1-247-872-00 | CARBON | 51K | 5% | 1/6W | |
| R324 | 1-247-872-00 | CARBON | 51K | 5% | 1/6W | |
| R325 | 1-247-872-00 | CARBON | 51K | 5% | 1/6W | |
| R326 | 1-247-872-00 | CARBON | 51K | 5% | 1/6W | |
| R327 | 1-247-872-00 | CARBON | 51K | 5% | 1/6W | |
| R328 | 1-247-872-00 | CARBON | 51K | 5% | 1/6W | |
| R329 | 1-247-872-00 | CARBON | 51K | 5% | 1/6W | |

| Ref.No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| R330 | 1-247-828-00 | CARBON | 750 | 5% | 1/6W | |
| R331 | 1-247-835-00 | CARBON | 1.5K | 5% | 1/6W | |
| R332 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R333 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R334 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R335 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R336 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R337 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R401 | 1-212-865-00 | FUSIBLE | 22 | 5% | 1/4W | F |
| R402 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R403 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R404 | 1-247-878-00 | CARBON | 91K | 5% | 1/6W | |
| R405 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R406 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R501 | 1-212-865-00 | FUSIBLE | 22 | 5% | 1/4W | F |
| R502 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R503 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R504 | 1-247-878-00 | CARBON | 91K | 5% | 1/6W | |
| R505 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R506 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R601 | 1-212-865-00 | FUSIBLE | 22 | 5% | 1/4W | F |
| R602 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R603 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R604 | 1-247-878-00 | CARBON | 91K | 5% | 1/6W | |
| R605 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R606 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R701 | 1-212-865-00 | FUSIBLE | 22 | 5% | 1/4W | F |
| R702 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R703 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R704 | 1-247-878-00 | CARBON | 91K | 5% | 1/6W | |
| R705 | 1-246-503-00 | CARBON | 18K | 5% | 1/4W | |
| R706 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R801 | 1-212-865-00 | FUSIBLE | 22 | 5% | 1/4W | F |
| R802 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R803 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R804 | 1-247-878-00 | CARBON | 91K | 5% | 1/6W | |
| R805 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R806 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R901 | 1-212-865-00 | FUSIBLE | 22 | 5% | 1/4W | F |
| R902 | 1-247-879-00 | CARBON | 100K | 5% | 1/6W | |
| R903 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R904 | 1-247-878-00 | CARBON | 91K | 5% | 1/6W | |
| R905 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R906 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R1001 | 1-246-446-00 | CARBON | 75 | 5% | 1/4W | |
| R1002 | 1-247-804-00 | CARBON | 75 | 5% | 1/6W | |
| R1003 | 1-246-446-00 | CARBON | 75 | 5% | 1/4W | |
| R1004 | 1-246-446-00 | CARBON | 75 | 5% | 1/4W | |
| R1005 | 1-246-446-00 | CARBON | 75 | 5% | 1/4W | |
| R1006 | 1-247-862-00 | CARBON | 20K | 5% | 1/6W | |
| R1007 | 1-247-862-00 | CARBON | 20K | 5% | 1/6W | |
| R1008 | 1-247-862-00 | CARBON | 20K | 5% | 1/6W | |
| R1009 | 1-247-862-00 | CARBON | 20K | 5% | 1/6W | |

**A** **B**

| Ref.No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| R1010 | 1-247-862-00 | CARBON | 20K | 5% | 1/6W | |
| R2001 | 1-212-865-00 | FUSIBLE | 22 | 5% | 1/4W | F |
| R2002 | 1-246-446-00 | CARBON | 75 | 5% | 1/4W | |
| R2003 | 1-212-865-00 | FUSIBLE | 22 | 5% | 1/4W | F |
| R2004 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R2005 | 1-247-800-00 | CARBON | 51 | 5% | 1/6W | |
| R2006 | 1-246-401-00 | CARBON | 1 | 5% | 1/4W | |
| R2007 | 1-246-401-00 | CARBON | 1 | 5% | 1/4W | |
| R2008 | 1-247-800-00 | CARBON | 51 | 5% | 1/6W | |
| R2009 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R2010 | 1-247-835-00 | CARBON | 1.5K | 5% | 1/6W | |
| R2011 | 1-247-845-00 | CARBON | 3.9K | 5% | 1/6W | |
| R2012 | 1-247-824-00 | CARBON | 510 | 5% | 1/6W | |
| R2013 | 1-247-824-00 | CARBON | 510 | 5% | 1/6W | |
| R2014 | 1-247-857-00 | CARBON | 12K | 5% | 1/6W | |
| R2015 | 1-247-807-00 | CARBON | 100 | 5% | 1/6W | |
| R2016 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R2017 | 1-247-811-00 | CARBON | 150 | 5% | 1/6W | |
| R2018 | 1-247-837-00 | CARBON | 1.8K | 5% | 1/6W | |
| R2019 | 1-247-811-00 | CARBON | 150 | 5% | 1/6W | |
| R2020 | 1-247-829-00 | CARBON | 820 | 5% | 1/6W | |
| R2021 | 1-247-837-00 | CARBON | 1.8K | 5% | 1/6W | |
| R2022 | 1-247-841-00 | CARBON | 2.7K | 5% | 1/6W | |
| R2023 | 1-247-835-00 | CARBON | 1.5K | 5% | 1/6W | |
| R2024 | 1-247-791-00 | CARBON | 22 | 5% | 1/6W | |
| R2025 | 1-247-811-00 | CARBON | 150 | 5% | 1/6W | |
| R2026 | 1-247-835-00 | CARBON | 1.5K | 5% | 1/6W | |
| R2027 | 1-247-867-00 | CARBON | 33K | 5% | 1/6W | |
| R2028 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R2029 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W | |
| R3001 | 1-212-865-00 | FUSIBLE | 22 | 5% | 1/4W | F |
| R3002 | 1-246-446-00 | CARBON | 75 | 5% | 1/4W | |
| R3003 | 1-212-865-00 | FUSIBLE | 22 | 5% | 1/4W | F |
| R3004 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R3005 | 1-247-800-00 | CARBON | 51 | 5% | 1/6W | |
| R3006 | 1-246-401-00 | CARBON | 1 | 5% | 1/4W | |
| R3007 | 1-246-401-00 | CARBON | 1 | 5% | 1/4W | |
| R3008 | 1-247-800-00 | CARBON | 51 | 5% | 1/6W | |
| R3009 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R3010 | 1-247-835-00 | CARBON | 1.5K | 5% | 1/6W | |
| R3011 | 1-247-845-00 | CARBON | 3.9K | 5% | 1/6W | |
| R3012 | 1-247-824-00 | CARBON | 510 | 5% | 1/6W | |
| R3013 | 1-247-824-00 | CARBON | 510 | 5% | 1/6W | |
| R3014 | 1-247-857-00 | CARBON | 12K | 5% | 1/6W | |
| R3015 | 1-247-807-00 | CARBON | 100 | 5% | 1/6W | |
| R3016 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R3017 | 1-247-811-00 | CARBON | 150 | 5% | 1/6W | |
| R3018 | 1-247-837-00 | CARBON | 1.8K | 5% | 1/6W | |
| R3019 | 1-247-811-00 | CARBON | 150 | 5% | 1/6W | |
| R3020 | 1-247-829-00 | CARBON | 820 | 5% | 1/6W | |
| R3021 | 1-247-837-00 | CARBON | 1.8K | 5% | 1/6W | |
| R3022 | 1-247-841-00 | CARBON | 2.7K | 5% | 1/6W | |
| R3023 | 1-247-835-00 | CARBON | 1.5K | 5% | 1/6W | |
| R3024 | 1-247-791-00 | CARBON | 22 | 5% | 1/6W | |
| R3025 | 1-247-811-00 | CARBON | 150 | 5% | 1/6W | |
| R3026 | 1-247-835-00 | CARBON | 1.5K | 5% | 1/6W | |
| R3027 | 1-247-867-00 | CARBON | 33K | 5% | 1/6W | |
| R3028 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R3029 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W | |
| R4001 | 1-212-865-00 | FUSIBLE | 22 | 5% | 1/4W | F |
| R4002 | 1-246-446-00 | CARBON | 75 | 5% | 1/4W | |
| R4003 | 1-212-865-00 | FUSIBLE | 22 | 5% | 1/4W | F |
| R4004 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R4005 | 1-247-800-00 | CARBON | 51 | 5% | 1/6W | |
| R4006 | 1-246-401-00 | CARBON | 1 | 5% | 1/4W | |
| R4007 | 1-246-401-00 | CARBON | 1 | 5% | 1/4W | |
| R4008 | 1-247-800-00 | CARBON | 51 | 5% | 1/6W | |
| R4009 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R4010 | 1-247-835-00 | CARBON | 1.5K | 5% | 1/6W | |
| R4011 | 1-247-845-00 | CARBON | 3.9K | 5% | 1/6W | |
| R4012 | 1-247-824-00 | CARBON | 510 | 5% | 1/6W | |
| R4013 | 1-247-824-00 | CARBON | 510 | 5% | 1/6W | |
| R4014 | 1-247-857-00 | CARBON | 12K | 5% | 1/6W | |
| R4015 | 1-247-807-00 | CARBON | 100 | 5% | 1/6W | |
| R4016 | 1-247-831-00 | CARBON | 1K | 5% | 1/6W | |
| R4017 | 1-247-811-00 | CARBON | 150 | 5% | 1/6W | |
| R4018 | 1-247-837-00 | CARBON | 1.8K | 5% | 1/6W | |
| R4019 | 1-247-811-00 | CARBON | 150 | 5% | 1/6W | |
| R4020 | 1-247-829-00 | CARBON | 820 | 5% | 1/6W | |
| R4021 | 1-247-837-00 | CARBON | 1.8K | 5% | 1/6W | |
| R4022 | 1-247-841-00 | CARBON | 2.7K | 5% | 1/6W | |
| R4023 | 1-247-835-00 | CARBON | 1.5K | 5% | 1/6W | |
| R4024 | 1-247-791-00 | CARBON | 22 | 5% | 1/6W | |
| R4025 | 1-247-811-00 | CARBON | 150 | 5% | 1/6W | |
| R4026 | 1-247-835-00 | CARBON | 1.5K | 5% | 1/6W | |
| R4027 | 1-247-867-00 | CARBON | 33K | 5% | 1/6W | |
| R4028 | 1-247-861-00 | CARBON | 18K | 5% | 1/6W | |
| R4029 | 1-247-855-00 | CARBON | 10K | 5% | 1/6W | |

VARIABLE RESISTOR

| | | |
|---|---|---|
| RV2001 | 1-226-232-00 | RES, ADJ, CARBON 500 |
| RV3001 | 1-226-232-00 | RES, ADJ, CARBON 500 |
| RV4001 | 1-226-232-00 | RES, ADJ, CARBON 500 |

CRYSTAL

| | | |
|---|---|---|
| X301 | 1-567-094-00 | VIBRATOR, CERAMIC |

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| | | |
|---|---|---|
| ♦ | 1-609-506-00 | B BOARD |
| | | ******* |
| | 1-507-846-00 | JACK, PIN (B) |